

In the Claims:

Please amend the claims as follows:

1. (currently amended) Measuring equipment (4) for forming a measured value ( $V_u$ ) for voltage representing an ac voltage ( $U$ ) on a high-voltage conductor (1), said measuring equipment comprising capacitor equipment (C41) with a known capacitance for connection between the high-voltage conductor (1) and ground potential (E), ~~characterized in that~~ wherein the capacitor equipment is in the form of a coupling capacitor (C) with an external voltage terminal (B41), ~~that~~ wherein the capacitor equipment is arranged in a support insulator, ~~that~~ wherein the measuring equipment comprises a screen (PS) of an electrically conductive material surrounding said external voltage terminal, and ~~that~~ wherein said electrically conductive screen is electrically conductively connected to the casing (N) of the support insulator and ~~that~~ wherein the measuring equipment further comprises current-measuring means (41) for sensing a capacitor current ( $I_c$ ) flowing through the capacitor equipment and for forming the measured value for voltage in dependence on said capacitor current.

2. (currently amended) ~~Measuring~~ The measuring equipment according to claim 1, ~~characterized in that~~ wherein said current-measuring means comprises a resistor (R41) for connection in series with the capacitor equipment, the measured value for voltage ( $V_u$ ) being formed in dependence on a sensed voltage across the resistor representing the capacitor current.

3. (currently amended) ~~Measuring~~ The measuring equipment according to ~~claims 1 and~~

~~2, characterized in that~~ claim 1, wherein said current-measuring means comprises a digital/optical measurement value transformer (43) for transforming the measured value for voltage into a series of light pulses (01) representing the measured value for voltage.

4. (currently amended) ~~Measuring~~ The measuring equipment according to claim 3, ~~characterized in that~~ wherein said resistor is connected between the high-voltage conductor and said external voltage terminal on the capacitor equipment and ~~that~~ wherein, in addition thereto, it comprises current-measuring means (42a, 42b) for forming a measured value for current ( $V_a$ ,  $V_w$ ) representing a line current ( $I$ ) flowing through the high-voltage conductor.

5. (currently amended) ~~Measuring~~ The measuring equipment according to claim 4, ~~characterized in that~~ wherein the measured value for current is supplied to said digital/optical measurement value transformer for transforming the measured value for current into a series of light pulses (01) representing the measured value for current.

6. (currently amended) ~~Measuring~~ The measuring equipment according to claim 5, ~~characterized in that~~ wherein the digital/optical measurement value transformer is arranged to sequentially transform said measured value for voltage and said measured value for current into series of light pulses for sequential transmission to ground potential on a common optical transmission link.

7. (currently amended) ~~Measuring~~ The measuring equipment according ~~any of claims 4-6, characterized in that~~ to claim 4, wherein said current-measuring means are mounted on the top

of said support insulator, and ~~that~~ wherein said electrically conductive screen is electrically conductively connected to the casing (~~N~~) of the support insulator as well as to an electrically conductive part (~~M~~) on the current-measuring means that is located at the potential of the high-voltage conductor but is electrically insulated from the external voltage terminal of the coupling capacitor.

8. (currently amended) A method for forming at least one measured value (~~V<sub>u</sub>~~) for voltage, representing an ac voltage (~~U~~) on a high-voltage conductor (~~I~~), wherein measuring equipment comprising capacitor equipment (~~C41~~) with a known capacitance is connected between the high-voltage conductor (~~I~~) and ground potential (~~E~~), ~~characterized in that~~ wherein the capacitor equipment is constituted by a coupling capacitor (~~C~~), and ~~that~~ wherein the coupling capacitor is provided with an external voltage terminal (~~B41~~), and ~~that~~ wherein the capacitor equipment is arranged in a support insulator (~~N~~), and ~~that~~ wherein said measuring equipment is provided with a screen (~~PS~~) of an electrically conductive material, surrounding said external voltage terminal and being electrically conductively connected to the casing (~~N~~) of the support insulator and ~~that~~ wherein a capacitor current (~~I<sub>e</sub>~~) flowing through the capacitor equipment is sensed and ~~that~~ wherein said measured value for voltage is formed in dependence on said capacitor current.

9. (currently amended) A The method according to claim 8, ~~characterized in that~~ wherein a resistor (~~R41~~) is connected in series with the high-voltage conductor and the capacitor equipment and ~~that~~ wherein said capacitor current (~~I<sub>e</sub>~~) is sensed as a measured value (~~V<sub>u</sub>~~) for voltage across the resistor.

10. (currently amended) ~~A~~ The method according to ~~any of claims 8 and 9,~~  
~~characterized in that~~ claim 8, wherein the measured value for voltage is supplied to a  
digital/optical measurement value transformer and that said the measured value for voltage is  
transformed into a series of light pulses (~~01~~) representing the measured value for voltage.

11. (currently amended) ~~A~~ The method according to claim 10, ~~characterized in that~~  
wherein said resistor (~~R41~~) is connected between the high-voltage conductor and said external  
voltage terminal on the capacitor equipment, and ~~that~~ wherein, in addition thereto, a current  
measuring means (~~42a, 42b~~) is connected to the measuring equipment, and ~~that~~ wherein a  
measured value (~~Va, Vw~~) for current, representing a line current (~~I~~) flowing through the high-  
voltage conductor, is sensed.

12. (currently amended) ~~A~~ The method according to claim 11, ~~characterized in that~~  
wherein the measured value for current is supplied to a digital/optical measurement value  
transformer, and ~~that~~ wherein said measured value for current is transformed into a series of light  
pulses (~~01~~) representing the measured value for current

13. (currently amended) ~~A~~ The method according to claim 12, ~~characterized in that~~  
wherein said measured value for voltage and said measured value for current are transmitted  
sequentially to ground potential on a common optical transmission link.

14. (currently amended) A The method according to ~~any of claims 11-13, characterized~~  
~~in that~~ claim 11, wherein said current-measuring means is mounted on the top of said support  
insulator, and ~~that~~ wherein said electrically conductive screen is electrically conductively  
connected to an electrically conductive part ~~(M)~~ on the current-measuring means that is located  
at the potential of the high-voltage conductor but is electrically insulated from the external  
voltage terminal of the coupling capacitor, as well as to the casing ~~(N)~~ of the support insulator.